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# (12) United States Patent DeHennis et al.

## (54) CONTINUOUS ANALYTE MONITORING SYSTEM

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None

See application file for complete search history.

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#### (57) ABSTRACT

An improved analyte monitoring system having a sensor and a transceiver with improved communication and/or user interface capabilities. The transceiver may communicate with and power the sensor. The transceiver may receive one or more analyte measurements from the sensor and may calculate one or more analyte concentrations based on the received analyte measurements. The transceiver may generate analyte concentration trends, alerts, and/or alarms based on the calculated analyte concentrations. The system may also include a display device, which may be, for example, a smartphone and may be used to display analyte measurements received from the transceiver. The display device may execute a mobile medical application. The system may include a data management system, which may be web-based.

#### 28 Claims, 16 Drawing Sheets

